



(19)

(11) Publication number:

2000196723 A

Generated Document.

PATENT ABSTRACTS OF JAPAN(21) Application number: **10378412**(51) Int'l. Cl.: **H04M 1/03 H01Q 1/24 H04Q 7/32 H04M 1/02 H04R 1/08**(22) Application date: **25.12.98**

(30) Priority:

(43) Date of application publication: **14.07.00**

(84) Designated contracting states:

(71) Applicant: **TAMURA KOICHI**(72) Inventor: **TAMURA KOICHI**

(74) Representative:

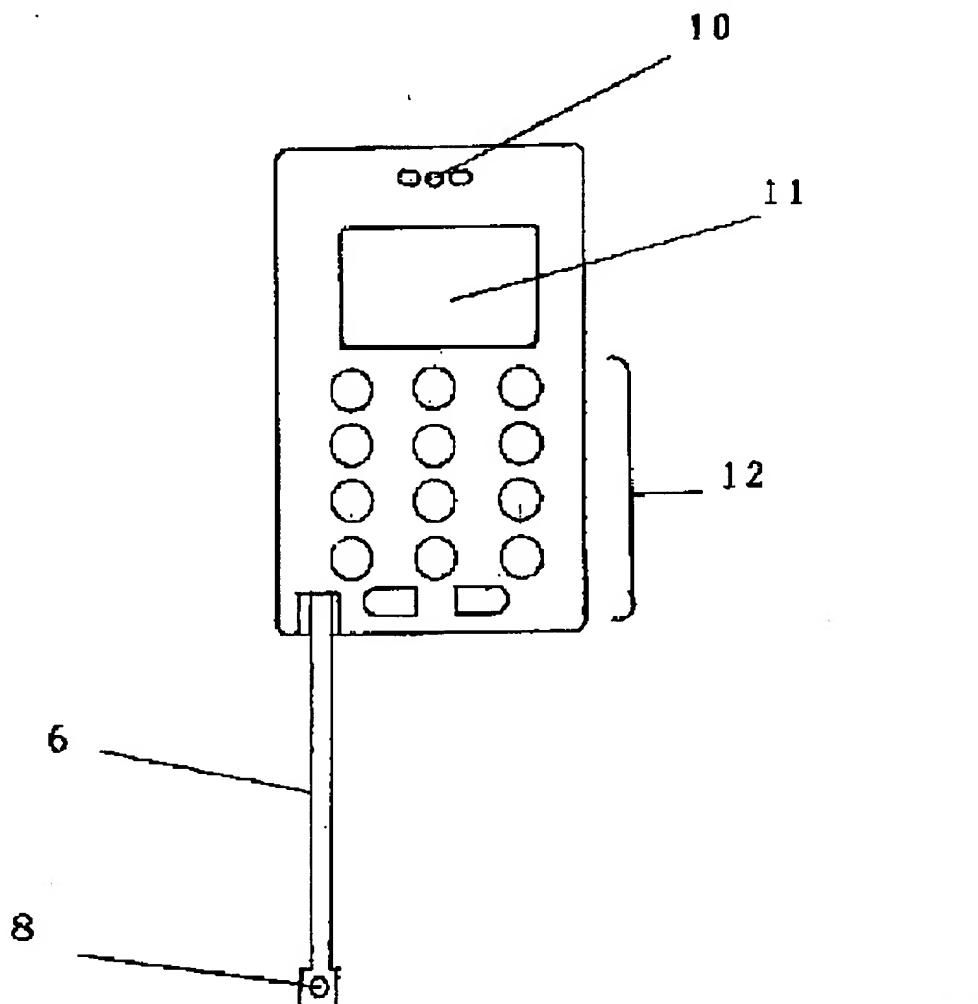
(54) CYLINDRICAL ANTENNA AND MICROPHONE

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a cylindrical antenna/microphone that an antenna and a microphone, which are used for a portable telephone set that is becoming smaller, are unified and that the antenna that is positioned at the back of the head and is detached apart from the back of the head.

SOLUTION: A cylindrical antenna 6 is formed and a sound take-in port 8 is made at the tip of the cylindrical antenna 6. The cylindrical antenna 6 with the sound take-in port 8 is put into a sheath and the cylindrical antenna 6 can be pulled out. A sound collection microphone is fitted to the sheath which is on the opposite side of the sound take-in port 8. It is fitted to the portable telephone set, the cylindrical antenna 6 is pulled out to a mouth and a conversation can be made with the opposite party of a telephone call.

COPYRIGHT: (C)2000,JPO

**BEST AVAILABLE COPY**